



## AMENDMENTS TO THE CLAIMS

### **Claims 1-3. (Canceled)**

**Claim 4. (New)** A thruster valve for controlling a flow of a high temperature fluid, said thruster valve comprising:

a valve casing having a fluid flow passage in which a valve plug is disposed, and a through hole;

a graphite liner arranged in said through hole, said graphite liner having a cavity and drive rod through holes;

a drive rod slidably received in said drive rod through holes of said graphite liner such that a seal is formed and maintained between said drive rod and said graphite liner, said drive rod having an interior end arranged inside said valve casing and an exterior end arranged outside said valve casing, wherein said drive rod is arranged so as to be driven in an axial direction by an actuator attached to the exterior end of said drive rod, and wherein the interior end of said drive rod is attached to the valve plug; and

at least one relief hole formed so as to extend through said graphite liner and said valve casing in a direction transverse to the axial direction of said drive rod so as to communicate said cavity of said graphite liner with the exterior of said valve casing, such that any high temperature fluid leaked from said fluid flow passage into said cavity of said graphite liner is provided a drain passage from said cavity to the exterior of said valve casing.

**Claim 5. (New)** The thruster valve according to claim 4, wherein said thruster valve is an aerospace craft-side thruster.

**Claim 6. (New)** The thruster valve according to claim 4, wherein said at least one relief hole comprises a plurality of relief holes extending in a direction transverse to the axial

direction of said drive rod so as to communicate said cavity of said graphite liner with the exterior of said valve casing.

**Claim 7. (New)** The thruster valve according to claim 4, wherein said fluid flow passage further comprises a fluid inlet and a fluid outlet.

**Claim 8. (New)** The thruster valve according to claim 7, wherein  
the interior end of said drive rod is arranged to adjust a position of the valve plug when said drive rod is driven in the axial direction, and  
the valve plug is arranged so as to control the flow of the high temperature fluid exiting said fluid outlet according to the position of the valve plug.

**Claim 9. (New)** A thruster valve for controlling a flow of a high temperature fluid, said thruster valve comprising:

- a valve casing having a through hole;
- a graphite liner arranged in said through hole, said graphite liner having a cavity and drive rod through holes;
- a drive rod slidably received in said drive rod through holes of said graphite liner such that a seal is formed and maintained between said drive rod and said graphite liner, said drive rod having an interior end arranged inside said valve casing and an exterior end arranged outside said valve casing, wherein said drive rod is arranged so as to be driven in an axial direction; and
- at least one relief hole formed so as to extend through said graphite liner and said valve casing in a direction transverse to the axial direction of said drive rod so as to communicate said cavity of said graphite liner with the exterior of said valve casing, such that any high temperature fluid leaked into said cavity of said graphite liner is provided a drain passage from said cavity to the exterior of said valve casing.

**Claim 10. (New)** The thruster valve according to claim 9, wherein said thruster valve

is an aerospace craft-side thruster.

**Claim 11. (New)** The thruster valve according to claim 9, wherein said at least one relief hole comprises a plurality of relief holes extending in a direction transverse to the axial direction of said drive rod so as to communicate said cavity of said graphite liner with the exterior of said valve casing.

**Claim 12. (New)** The thruster valve according to claim 9, wherein said fluid flow passage further comprises a fluid inlet and a fluid outlet.

**Claim 13. (New)** The thruster valve according to claim 12, wherein  
a valve plug is disposed in a fluid flow passage arranged in said valve casing and is arranged to control the flow of the high temperature fluid according to a position of said valve plug, and  
the interior end of said drive rod is arranged to adjust the position of said valve plug when said drive rod is driven in the axial direction.

**Claim 14. (New)** A thruster valve for controlling a flow of a high temperature fluid, said thruster valve comprising:  
a valve casing having a fluid flow passage in which a valve plug is disposed, and a through hole;  
a high temperature seal structure having  
a graphite liner arranged in said through hole, said graphite liner having a cavity and drive rod through holes, and  
a drive rod slidably received in said drive rod through holes of said graphite liner such that a seal is formed and maintained between said drive rod and said graphite liner, said drive rod having an interior end arranged inside said valve casing and an exterior end arranged outside said valve casing, wherein said drive rod is arranged so as to be driven in

an axial direction by an actuator attached to the exterior end of said drive rod, and wherein the interior end of said drive rod is attached to the valve plug; and

at least one relief hole formed so as to extend through said graphite liner and said valve casing in a direction transverse to the axial direction of said drive rod so as to communicate said cavity of said graphite liner with the exterior of said valve casing, such that any high temperature fluid leaked from said fluid flow passage into said cavity of said graphite liner is provided a drain passage from said cavity to the exterior of said valve casing.

**Claim 15. (New)** The thruster valve according to claim 14, wherein said thruster valve is an aerospace craft-side thruster.

**Claim 16. (New)** The thruster valve according to claim 14, wherein said at least one relief hole comprises a plurality of relief holes extending in a direction transverse to the axial direction of said drive rod so as to communicate said cavity of said graphite liner with the exterior of said valve casing.

**Claim 17. (New)** The thruster valve according to claim 14, wherein said fluid flow passage further comprises a fluid inlet and a fluid outlet.

**Claim 18. (New)** The thruster valve according to claim 17, wherein the interior end of said drive rod is arranged to adjust a position of the valve plug when said drive rod is driven in the axial direction, and the valve plug is arranged so as to control the flow of the high temperature fluid exiting said fluid outlet according to the position of the valve plug.